

USER MANUAL

Fine Blasting Unit

GOBI-2



Fig: Gobi-2



WASSERMANN DENTAL - MASCHINEN GmbH

WASSERMANN
DENTAL-MASCHINEN

Dear customer,

Thank you for choosing a product from the Wassermann range. Wassermann dental equipment incorporates the highest standards of quality and the latest technology.

In order to enjoy maximum performance and years of trouble-free operation, please read this instruction manual carefully before you connect this device and start work, and operate the device according to the recommended guidelines. The operation safety and the functionality of this device can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this instruction manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this device.



Make sure that anyone using this device has read and understood this instruction manual.

Keep this instruction manual in a safe place where it can be referred to as required at any time.

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1 FEATURES

This precision fine blasting unit of the WASSERMANN-brand offers you the highest quality and most advanced technology.

This 2-chamber-unit is perfect for blasting, roughing as well as blasting with specially fused alumina. The entire system is continuously under pressure and is therefore always ready for use. The relation between air and the blasting medium is set at the factory. It is determined by the size of the drillings. However, the discharge velocity can be varied by the built-in pressure reducer. The discharge velocity determines the outflowing amount of blasting media (while the relation is kept optimal and constant).

Even when switching on the unit again, you can use the quick-start- and quick-stop-function to begin blasting immediately. This is possible due to the crushing valve at the conducting hose.

2 FOR YOUR OWN SAFETY

2.1 Read the operating instructions carefully

Handling and operation of this unit require detailed knowledge and attention as explained in these operating instructions. This unit is designed only for the described purpose.

Especially important notes are marked as follows:

Warning !



This is a warning indicating risk and hazard situations. Ignorance can cause danger to life. These warnings must always be heeded.



Information !

This information refers to important features you have to consider.

2.2 Safety instructions

- This unit is designed for AC 220-240 V / 50/60 Hz only. Make sure that the unit is always operated with the correct voltage.
- Disconnect the power plug before carrying out any service or repairs.

2.3 Reliability for functionality and damages

The reliability for the functionality of the unit depends on the owner or operator, whether the unit will be serviced, repaired or altered improperly by persons not belonging to an authorized service company or whether it is used for other than the described purpose.

The unit must be operated and serviced according to these operating instructions. For damages ***incurred due to negligence*** of these notes, Wassermann Dental-Maschinen GmbH ***cannot*** be held responsible.

Warranty and reliability conditions of the terms of sale and delivery of the Wassermann Dental-Maschinen GmbH are not extended by the above mentioned notes.



Please keep these operating instructions in an easily accessible place and make sure they are read and understood.

3 Application

This 2-chamber-blasting unit is designed for blasting, roughing as well as blasting with specially fused alumina. Only use the device for this type of application.

3.1 Unpacking / Transport

- Remove all packing material and place the unit on an even and stable surface. Check the included accessories (see 7.4).

Before moving the unit, please make sure that it is disconnected from the power source.

- To avoid unnecessary transport damages, pay attention to proper packing when transporting the unit.

3.2 Installation / Storage

- Place the unit in a horizontal position.
- Place the unit so that the work area is freely accessible and operation is not restricted. (Please consider the structural dimensions). **Do not place the unit outdoors.**
- In case of long-term storage, the unit must be protected against humidity and dust.
- Prepare an electric- and compressed air connection.
- Furthermore an external dust-extractor should be connected. The connectors are accessible from the back.
- The dust-extractor should be connected to the power outlet at the back of the unit. In this case the dust-extractor switches on and off simultaneously with the fine-blasting-unit.



Attention: Never connect to an oxygen bottle. Risk of dust explosion.

4 Starting



Before using the unit for the first time, let it stand with open chambers until it has reached room temperature.

- It is absolutely necessary to switch the unit off before filling.
- The chambers can first be screwed on when they are completely pressureless.
Press the red knob of the screwed-on cover at the right side until no outflowing air can be heard.



Both chambers are ventilated simultaneously by pressing the red knob (container at the right).

- The chamber at the right (red) will always be filled with 110-250 my material.
- The chamber at the left (blue) will always be filled with 50-110 my material.
- The chambers are only allowed to be filled up to 4 cm from the upper chamber edge.



Before setting on the containers you have to assure that the threads and sealing surfaces are free of blasting media grains.

- Screw on the screwed-on cover properly in accordance with the colour indicator.
When all chambers have been screwed on the unit is ready for use and can be switched on.
- Insert the power plug firmly into the power outlet (220-240 V / 50/60 Hz).
- Switch on the main switch (green toggle switch).
- Set the pressure reducer to working pressure. There must be no hissing noise.
Otherwise, please retighten the screwed-on cover by hand.

5 Assembly follow-up kit

Please carry out the following preparatory measures:

- Before you start the assembly check that the follow-up kit has been delivered complete.
- Unplug the Gobi-2 from its socket so that the mains supply is disconnected.
- Remove your pressurised air connection to a safe distance and make sure that the Gobi-2 is no longer “under pressure”.
- In the work room remove the plug for the lead through of the steel stylus: left for the left-hand add-on tank (yellow); right for the right-hand add-on tank (green). **Figure 1**
- On the left-hand add-on tank loosen the lower screw of the electro-cover.

Only loosen, do not remove! Figure 2

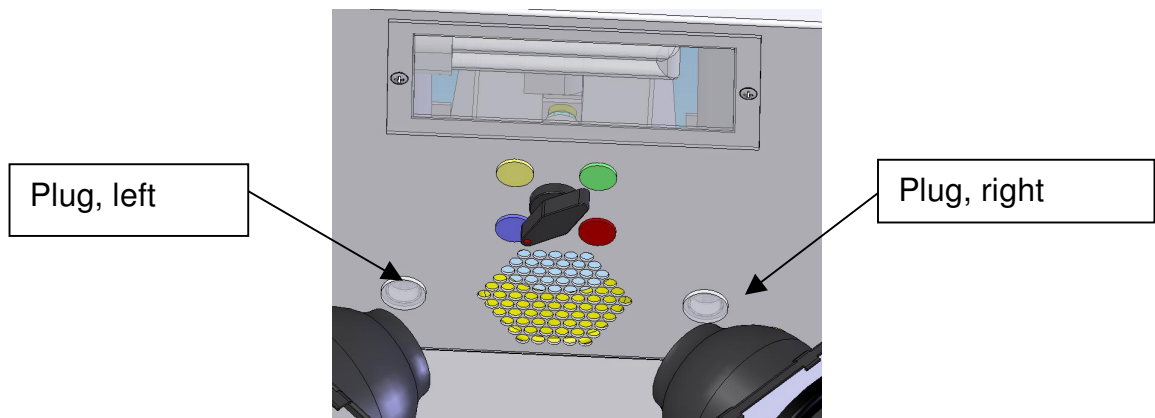


Figure 1

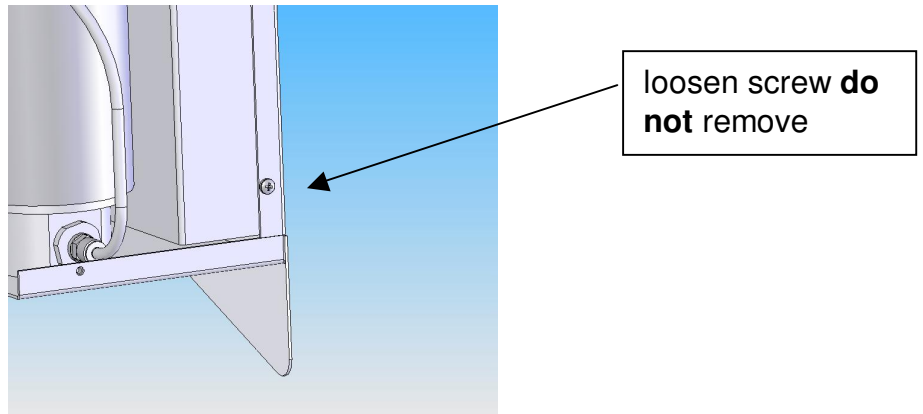


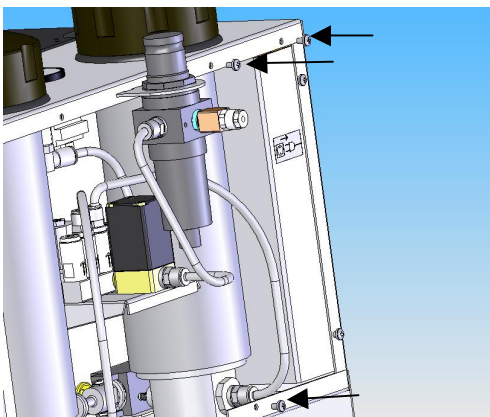
Figure 2

Now you are ready to begin the following assembly tasks:

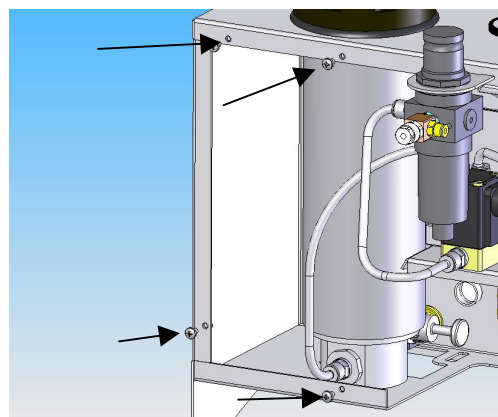
- Screw the screws delivered with the add-on tank loosely into position in the casing of the Gobi-2.

Figures 3 and 4

- Now hook in the add-on tank onto the screw. Please take special care to see that on all three of the hook-in drillings the screw heads are flush. The “wing” of the tank retaining plate must be pushed underneath the screw which is inserted in a sideways position. **Figure 5**



Figures 3



FIGURES 4

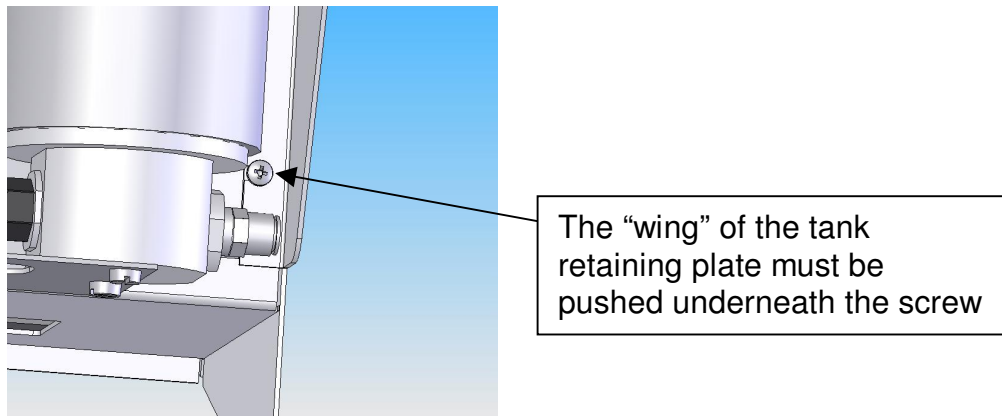


Figure 5

- All accessible screws are now to be screwed in tight.
- Push the steel stylus into the work cabin through the hole in the casing.
- Close the hole with the lead-through grommet thereby fixing the steel stylus. Take care to lay the steel hose with a slight curve and don't let it buckle.
- Through the work cabin remove the indicator window and take out the lamp.
- In each case remove the appropriate connection plug by pressing down the ring of the plug screw-joint, at the same time pulling on the connection plug. **Figure 6**

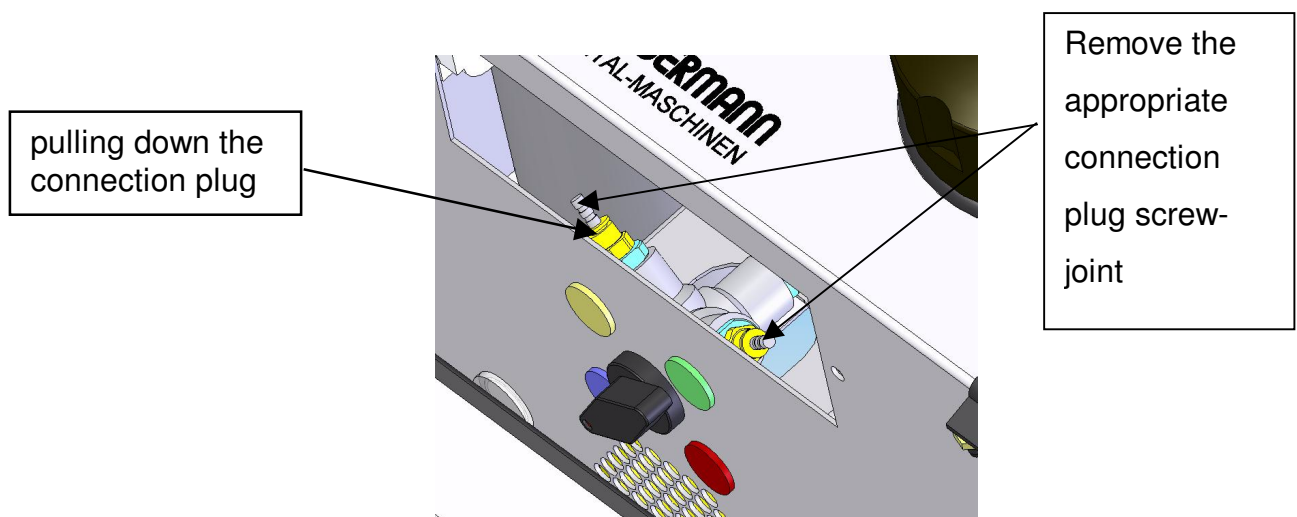


Figure 6

- With the help of the PA-hose (320023) connect the ball cock with the squeezing valve.
- Fix the lamp back in and then the cover.
- On the back remove the connection plug on the air current unit, there also by pressing down the ring of the plug screw-joint and at the same time pulling on the connection plug. Tip: try pressing the ring down with the assistance of a slotted screwdriver. **Figure 7**

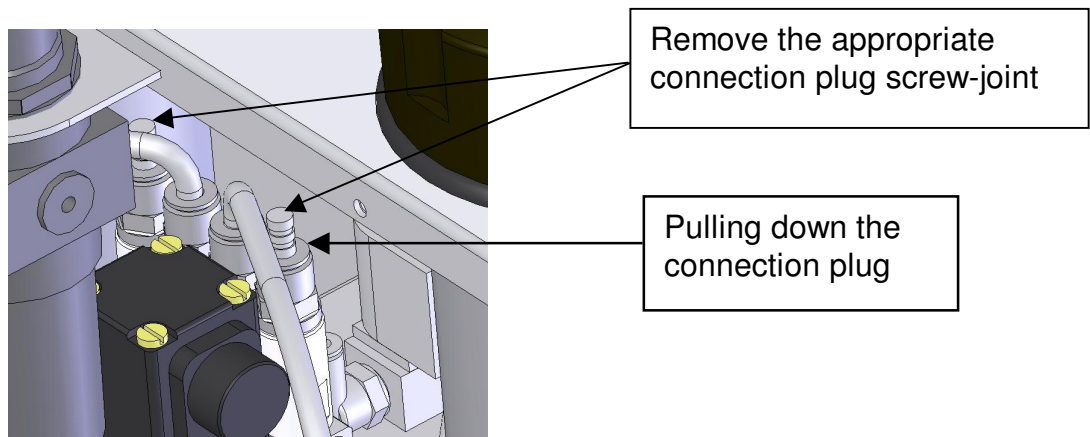


Figure 7

- With the help of the PU-hose (320054) connect the air current unit with the blasting material container.
- Please take care that the blasting hoses run along under the sieve grille and that the blasting protector is mounted.

6 Operation

6.1 Operation

1. Turn on main switch (green toggle switch).
2. Set the working pressure at the desired level on the reducing valve (at least 2.3 bar at most 6 bar).
3. Designate the blasting material container by using the selection switch built-in in the work room. If you do not possess any add-on tanks, then the green and yellow settings will not perform any functions. Do NOT select them, since this can lead to complications.
4. According to the colour selected, take the appropriate stylus in your hand.
5. Trigger the blasting process with the foot control.



Working is only allowed with the blasting chambers closed.



Please wear safety goggles!



Due to the operating condition, the amount of blasting media flow may change when the blasting media amount decreases.

By shortly tilting the unit it is possible to continue working for a short time. However, this is an indication that you have to refill blasting media.



All recommendations given for the use of this unit - regardless of whether given verbally, in writing or in the form of practical instructions - are based on our own experiences and tests and can only be considered as standard values.

7 Troubleshooting/Remedies

Symptom/Trouble	Possible cause	Possible solution
irregular flow of blasting material	too little blasting material in container	re-fill the container
	jet on stylus too small	use larger jet
	blasting material is moist	use blasting material of correct dryness
no flow of blasting material	container empty	re-fill container
	main jet and/or steel hose blocked	Use recommended, dry blasting material. Unscrew jet on the stylus. Trigger blasting process. Blasting material should flow. If necessary, briefly hold the hose closed to build up some counter-pressure.
	wrong selection of colour circuit setting	please switch to the correct colour circuit setting
	ancillary jet blocked	refer above
	too little pressurised air < 2.3 bar	increase pressure
Decreasing and/or to low blasting pressure	filter blocked and/or buckled closed	change filter element



If the trouble persists, please contact your dealer or our service department.

8 Maintenance

8.1 Cleaning

- To ensure continuous and correct operation the unit must be cleaned regularly.
No chemicals are required for the cleaning. Just clean the unit with a sponge or soft cloth and a mild cleaning agent.
- The **identification plate** must always be kept in easily legible condition and must not be removed.
- The inside of the chambers and the protection screens can be cleaned with compressed air. Fine-dust will be sucked out by the dust-extractor.
- Never use strong and abrasive solvents for cleaning the screens.
- Coarse-grained sand, which cannot be sucked out by the dust-extractor can be removed through the discharge opening.

8.2 Servicing

This unit does not require any special maintenance. Just make sure that the device is kept clean.

However, after using the unit a certain time, it will be necessary to replace some parts. Please take care of the following parts:

8.2.1 Grip-Cuff Replacement:

Cuffs can also be replaced with gloves. The procedure is the same.

- Loosen the connector with pliers and unscrew the throughgrip (4 screws).
- Pull off the old cuff and put on the new one so that it completely covers the opening.
- Attach the new connector. Take care that the closing of the connector is placed inside the notch of the opening.
- Tighten the opening.

8.2.2 Screen Replacement:

- Open the flap and loosen the five knurled nuts.
 - Remove the guide rails
 - Fold the screen to the front and pull it out . **Please take care of the spacer reels.**
 - Replace the screens and reassemble everything in reverse order.
-

8.2.3 Conducting Hose Replacement:

Before changing, the mains plug must be disconnected and the pressurised air connection detached.

The pressure of all the tanks must be released (cf. Commissioning).

- Take sieve unit out of the chamber.
 - Lay the appliance on its side so that you have access to the bottom of the appliance.
 - In order to detach from the tank the blasting material hose in question,
 - loosen the black nut with a no. 17 spanner, then take it, and subsequently the hose too, off.
 - Pull and/or lever the silver handle on the squeezing valve, with the other
 - hand pulling the hose through the through-put and into the interior.
 - Remove hose protection
 - In principle the installation takes place exactly in the reverse manner. The hose is pushed from the interior of the chamber through the hole on the squeezing valve, led through it again and pushed onto the nipple of the tank (don't forget the nut and the plastic cap!). Before the nut is tightened the fabric must be completely pulled over the rubber. Should this be difficult to achieve then push the fabric outwards from the stylus right to the end until enough fabric is available.
 - The nut can then be completely tightened (not with force! Don't overturn it!).
 - The small hose is only to be pushed in up to the squeezing valve. The hose should be sandwiched in between both of the styluses. It serves as a protection for the blasting hose.
 - Put the appliance back in an upright position and re-install the sieve grille. Please take care that the blasting hoses run along under the sieve grille and that the hose protector is mounted.
-

8.2.4 Lamp Replacement:

Before changing it you must pull out the mains plug. The lamp is behind the indicator window.

- Loosen knurled nuts and take off the indicator window.
- Pull the lamp towards the right out of its socket and in re-placing make sure that the new lamp fits correctly back into the socket.
- put back the indicator window and tighten the screws.

8.2.5 Nozzle Replacement:

Take care that the nozzle always corresponds to the size of the used blasting medium (see "Specifications"). The replacement is very easy. Simply unscrew the old nozzle and screw on a new one. **Important!:** Before setting up a new nozzle, shortly operate the unit and blow away old blasting medium which may remain inside the hose.

8.2.6 Protection Filter Replacement:

After some time of usage the filter inlet may become clogged. This filter inlet is situated inside a brass case (protection filter), which is attached above the relief valve. A hose runs from the protection filter to the distributor and from there separate hoses run to each container.

- Lightly press down the plug fuse at the hose and remove the hose.
 - Unscrew the protection filter with a suitable tool from the relief valve.
 - Screw on the plug connection of the old protection filter to the new protection filter.
 - Screw on a new protection filter and mount the hose.
-

8.2.7 Water Separator

A water separator, that absorbs any condensation coming out of the compressor, is situated at the back of the unit. It must be checked regularly and at the latest when the max. level is reached, it must be emptied. To do this, press the yellow discharge lever up so that the water can flow into the container you have placed under the unit.

Remarks:

Obstructions normally occur from soiled or lumpy blasting medium. If the sand draws moisture, check the condensator.

Most obstructions occur inside the nozzle. To remove such obstructions unscrew the nozzle and clean it. In general this would be sufficient to make the stuck grains come loose. If the obstruction persists, use a needle and push it through the hole.

8.3 Warranty

The warranty period for all our units is 12 months. Should trouble occur during this time, please inform your dealer or contact our service department.

Only use the blasting unit in perfect technical condition. Should trouble occur, which could endanger employees or third persons, the unit **must** be inspected and repaired before it is used again.

Damage, caused by improper use, external mechanical influences, transport damages as well as alterations made by unauthorized persons, is not covered by this warranty.

8.4 Spare Parts

As **extraction** we strongly recommend our super-silent unit **WTS-1R** with the finest filter. This unit works effectively and provides large filtering capacity.

Accessories	
Part no.	Description
190800	additional tank, left with fineblasting nozzle 0,6 mm
190802	additional tank, right with fineblasting nozzle 0,8 mm

Spare parts	
Part no.	Description
190550	Spare nozzle 0.6 mm
190551	Spare nozzle 0.8 mm
190552	Spare nozzle 1.2 mm
190554	Spare hose-unit green
190555	Spare hose-unit red
190557	Spare hose-unit blue
190558	Spare hose-unit gold
190572	Manifold
190432	Spare protection sheet with special coating
511206	Spacer bush

8.5 Repairs

All service and repair work should be referred to qualified service personnel only. For replacement, use only original WASSERMANN parts. The product liability expires if any modifications or alterations have been made by others as well as if non-original spare parts are used.

9 Specifications

190896 Fine Blasting Unit GOBI-2

Power supply :	220-240 V / 50/60 Hz
Power consumption:	0.2 A / 50 W
Overall dimensions:	Width: 430 mm Height: 350 mm Depth: 530 mm
Weight:	17.5 kg
Container capacity:	800 ccm = 1.2 kg
Compressed air connection:	3 bar min. - 6 bar max.



The noise emission values of the fine-blasting-units is $\leq 70 \text{ dB(A)}$.



Specifications and design are subject to change without notice.

10 EC conformity certificate

in accordance with 2006/95/EG (low-voltage guidelines) and 2004/108/EG (EMV guidelines) and 98/37/EG (machinery guidelines)

Manufacturer:	W A S S E R M A N N Dental-Maschinen GmbH Rudorffweg 15 - 17 D-21031 Hamburg	Product description:	Laboratory fine blasting unit for dental applications
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Model:	GOBI 2 with 2 blasting material containers	190896
	GOBI 3 with 3 blasting material containers */**	
	GOBI 4 with 4 blasting material containers *&**	
	*additional tank right (Art-Nr. 190802)	
	**additional tank left (Art-Nr. 190800)	

Applicable standards:	DIN EN 61010-1:2004
	DIN EN 61000-6-3:2005
	DIN EN 61000-6-1:2002
	DIN 45635-1:1984
	DIN EN 60335-1:2007

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

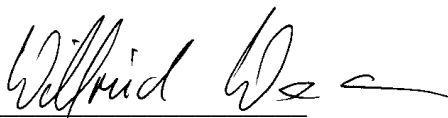
Esta máquina, anteriormente mencionada, cumple con los límites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigingen aan de machine worden aangebracht.

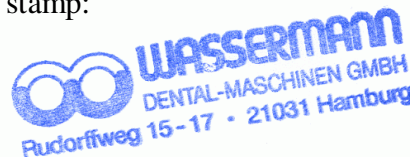
Place, date: Hamburg, 20.07.2007

Company stamp:

Signed: _____



Wilfried Wassermann
(Managing Director)



Notes:



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